

IV. Remarks.

The Examiner entered the following rejections in the office action.

1. Claims 1 and 7 are rejected under 35 USC 102(b) as being anticipated by Hirtreiter et al. (US patent 3897941).

Applicant respectfully disagrees with the Examiner's conclusion. Hirtreiter does not teach all of the elements of the claim.

As to amended claims 1 and 7, Hirtreiter does not teach a torsional strain less than approximately 0.5°. Hirtreiter discloses an air spring having three layers of cords (9, 15, 17), for example see Figs. 1, 4, 8, 11, 12, 14, 15; or four layers of cords (9,17), for example see Figs. 10, 13. Hirtreiter does not teach first and second cord layer having the desirable torsional strain range derived from the inventive arrangement of the cord bias angles.

In his argument the Examiner suggests that torsional strain is a measure of air spring rigidity. However, no citations or references are offered to support this proposition. Hirtreiter offers no teaching as to the torsional behavior of the cited prior art air spring. In fact, Hirtreiter appears to assume no torsional behavior at all since the air spring is bolted to a suspension system using threaded studs, col. 7, lines 42-43.

Applicant asserts that any rigidity taught in Hirtreiter is derived from the plies of brass coated high carbon steel cables (16, 17), col. 10, lines 17-18 and 28-29; col. 5, lines 5-18. "Rigid" is defined in Hirtreiter as axial rigidity and is determined based upon an axial (or compressive) distortion or deformation of the connecting portion (13) of the member, col. 7, lines 19-24; col. 11, lines 4-12, col. 7, lines 25-33. To establish this axial rigidity Hirtreiter teaches that solid rigid elements such as straight or crimped metal rods, bars or slats may be embedded in the wall, col. 5, lines 19-36, in addition to the steel cables. However, the steel cables or metal rods do not extend the entire length of the air spring, col. 5, lines 27-32. Instead, they are only used in the connecting portion (13) which is disposed between, but is not part of, the rolling lobes (flexing portion 11) (flexible portion 30) col. 4, lines 42-53; col. 7, lines 34-40.

Torsional strain is a different matter and relates to the relative angular rotation of the pistons 32. No mention is made in Hirtreiter of the torsional strain behavior of the disclosed multiple layer, metal reinforced construction.

Applicant respectfully asserts that axial rigidity is not indicative or conclusive of the suggested torsional strain behavior of the Hirtreiter air spring, if any. No citation is offered by the Examiner to support the argument. Therefore, the limitation is not taught by Hirtreiter.

2. Claims 2-6 and 8-10 are rejected under 35 USC 103(a) as being unpatentable over Hirtreiter et al. (US patent 3897941).

Claims 2 and 3 depend directly or ultimately depend from claim 1.

As to claim 4, please refer to the foregoing argument.

Claims 5 and 6 depend directly or ultimately from claim 4.

Claim 8-10 depend directly or ultimately from claim 7.

3. Claim 11 is rejected under 35 USC 103(a) as being unpatentable over Hirtreiter et al. (US patent 3897941) in view of Crabtree (US 4763883).

Claim 11 depends from claim 7.

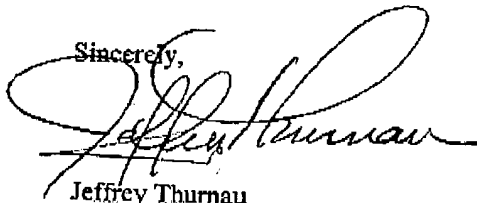
Applicant respectfully requests withdrawal of the rejection as to all claims.

V. Fees.

Any fees payable for this amendment including the request for extension of time can be deducted from deposit account 07-0475 in the name of The Gates Corporation.

Thank you for your attention to this case. If any questions arise, please call at the number below.

Sincerely,



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